

REMARKS

This Amendment is filed in response to the Office Action mailed on January 16, 2007. All objections and rejections are respectfully traversed.

Claims 1-37 are currently pending.

Claims 34-37 are added.

Request for Interview

The Applicant respectfully requests a telephonic interview with the Examiner after the Examiner has had an opportunity to consider this Amendment, but before the issuance of the next Office Action. The Applicant may be reached at 617-951-3067.

Claim Rejections - 35 USC § 103

At paragraph 3 of the Office Action, claims 1-33 were rejected under 35 U.S.C. § 103 as being unpatentable over Gillespie, US Patent No. 6,269,391, hereinafter Gillespie.

The present invention, as set forth in representative claim 1, comprises in part:

1. A method for executing uniprocessor (UP) coded workloads in a multi-processor (MP) computer system without having to rewrite the UP-coded workloads' code, comprising:

organizing the UP-coded workloads into one or more concurrency groups, wherein UP-coded workloads in the same concurrency group are not permitted to execute concurrently with one another in the MP computer system;

scheduling first and second execution vehicles that respectively execute on different processors in the MP computer system at substantially the same time;

acquiring a first concurrency group by the first execution vehicle and a second concurrency group by the second execution vehicle; and

executing UP-coded workloads in the first concurrency group through the first execution vehicle at substantially the same time as UP-coded workloads in the second concurrency group are executed through the second execution vehicle.

By way of background, Gillespie discloses a scheduling kernel for scheduling several virtual machines on a multiprocessor. Gillespie organizes threads to be processed into an execution exclusion set, where the execution exclusion set is a group of threads or virtual machines, none of which may be processed in parallel. (Col. 6, lines 50-53). The exclusion set is bound to a single processor of the multiprocessor. Additionally, the execution exclusion set are monitored by a execution exclusion set module to limit execution to a single thread at a time out of any particular execution exclusion set of threads. (Abstract)

Applicant respectfully urges that Gillespie does not teach or suggest Applicant's claimed novel *organizing the UP-coded workloads into one or more concurrency groups, wherein UP-coded workloads in the same concurrency group are not permitted to execute concurrently with one another in the MP computer system ... executing UP-coded workloads in the first concurrency group through the first execution vehicle at substantially the same time as UP-coded workloads in the second concurrency group are executed through the second execution vehicle.* In further detail, in Applicant's claimed invention uniprocessor (UP) coded workloads are organized into two concurrency groups. In each concurrency group, each *UP-coded workload* is not permitted to

execute concurrently with any other UP-coded workload in that particular concurrency group. The first concurrency group is assigned to a first execution vehicle and the second concurrency group is assigned to a second execution vehicle. Both the first and second execution vehicles process their respective concurrency group at *substantially the same time*. In contrast, Gillespie teaches away from Applicant's processing of two concurrency groups at substantially the same time because of the Abstract, which states:

“Execution exclusion sets may be created and enforced by an execution exclusion set module to limit execution to a single thread at a time out of any particular execution exclusion set of threads.” (Abstract, lines 7-10).

In reference to the statement above, Gillespie does not suggest processing of two execution exclusion sets at one time, as claimed by Applicant. The Examiner states that “Gillespie does not expressly disclose a second concurrency group by the second execution vehicle.” (Page 4 Office Action). For Gillespie to make Applicant's invention obvious, there needs to be a teaching or suggestion in Gillespie to a person skilled in the art without improper hindsight. In the abstract of Gillespie there is a clear teaching away because the execution exclusion sets may be limited to a single particular thread out of all the execution exclusion sets. There is no suggestion for a person skilled in the art to adjust Gillespie to have multiple execution exclusion sets processing at the same time without hindsight because Gillespie teaches of limiting the number to one thread processing at a time.

Accordingly, Applicant respectfully urges that Gillespie is legally insufficient to make obvious the present claims under 35 U.S.C. §103 because of the absence of the Ap-

plicant's claimed novel *organizing the UP-coded workloads into one or more concurrency groups, wherein UP-coded workloads in the same concurrency group are not permitted to execute concurrently with one another in the MP computer system ... executing UP-coded workloads in the first concurrency group through the first execution vehicle at substantially the same time as UP-coded workloads in the second concurrency group are executed through the second execution vehicle.*

All independent claims are believed to be in condition for allowance.

All dependent claims are believed to be dependent from allowable independent claims.

The Applicant respectfully solicits favorable action.

Please charge any additional fee occasioned by this paper to our Deposit Account No. 03-1237.

Respectfully submitted,

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